St Joseph's School
El Obour

Science Department

6th Primary
1st term

Name: ……………………………………

Class: ……………………………………





Unit One: Force and Motion

Lesson (1): Mass and weight

A. Complete the following statements:

1. The mass of a body on the moon surface is 10 kgm so its mass on earth surface equals ……………………………….
2. The weight of a body its mass 200 gm. on earth surface nearly equals ……………………………….
3. The Newton is nearly equals weight of a body its mass ……………….
4. From the tools of measuring Weight is ………………………. while from tools of measuring mass is …………………….
5. The mass of half liter of water equals ……………………………….
6. The weight of a person in a balloon at certain height from earth surface equals 70 Newton, so the weight of the person on earth surface is ………………. than 70 Newton.
7. The mass is measured by ………………………. unit while the weight is measured by ……………………….unit.
8. The factors affect the weight of the body depend on

……………………., ……………………………….and……………………………………….



9. The weight of the body on moon surface equals ....of its weight on earth's surface.

10. The weight of the body on earth's surface increases as the ....increases.

11. As the mass of the planet on which the body exits increase the............................of the planet increases and .... of the body increases.

12. The weight is...

13. The planet on which the body weight equals 6 times as its weight on the moon is ....

14. The weight (Newton) = the mass (kilogram) × ....

15. The mass is measured by using ....and the weight is measured by .... unit.

16. The attraction force of earth for a body is called .... and it increases as ....increases.

17. An object whose weight is 20 Newton on Earth, so its mass equals...............

18. The weight of any object .... when the distance between the body and the center of the Earth increases.

19. The mass of a body on the moon's surface is 10 kg., so its mass on the Earth's surface equals......................

20. Mass is a constant value and it is not affected by changing......................

B. Put (√) or (X) and correct the wrong one:

1) The mass of a body on earth's surface equal 6 kgm, so it's mass on moon surface equal 1 kgm. (   )
2) The mass of one liter of distilled water equals 100 gm. (   )
3) Mass is the force of earth's gravity to an object. (   )
4) As the mass of the planet increases the weight of body on it decreases. (   )
5) The weight is constant amount changes as the location changes. (   )
6) The mass is measured by Newton which is equivalent to 1000 gram. (   )
7) The mass of a body on the moon surface is one sixth (1/6) its mass on the Earth's surface. (   )
8) When the mass of an object on Earth equals 2 kg., so its weight equals 200 Newton. (   )
9) The digital balance is used in measuring weight (   )

C. **Write the scientific :**

1) The amount of matter that the body contains . (........................)
2) The amount of earth gravity to the bodies. (.............................)
3) A device used to measure the mass of objects (.............................)
4) A tool used to measure body weight. (........................)
5) The amount of matter that the body contains. (........................)
6) The measuring unit of mass which equals the mass of one liter of distilled water at the normal temperature. (.............................)
7) Mass (kg) x 10 (..................................)
8) Weight/10 (..................................)
9) Device of measuring the mass of gold. (..................................)

D. **Give reason for:**

1. The weight of any body is different as the planets differ.
....
2. The weight of the body changes as its location changes.
....
3. The bodies always fall down towards earth.
....
4. The balance scale must be on horizontal stable surface.
....
5. The wire of spring balance expands when a body is hanged to it.
....

6. Your weight on the moon is less than your weight on the earth.

....

7. The weight of the body on earth's surface differs from its weight on another planet.

....

8. The body weight in a balloon is different from its weight on the earth's surface.

....

9. Astronauts are weightless in space

....

E. Compare between mass and weight

P.O.C	Mass	Weight
Definition		
Device		
Unit of measurement		
Effect of different Places		
Direction		

F) What happens when:

1) There is no earth gravity.

....

2) The distance between a person in a balloon and the center of Earth increases.

....

3) Transferring a body of 60 Newton weight from the Earth's surface to the moon's surface

....

G) Problems:

1. A body its mass 10 Kgm, calculate
   a) Its weight on earth's surface.
   b) Its mass on moon.
   c) Its weight on moon.

....

....

2. A body its mass 600 gm., Calculate
   a) Its weight on earth's surface
   b) Its mass on moon's surface.
   c) Its weight on moon's surface.

....

....

3. A body its weight on moon 30 Newton. Calculate

a) The mass of it on moon.

b) Weight on earth.

c) Mass on earth.

....

....

4. A piece of rock is placed in a pan of double pans scale, the sum of masses which are placed in the other pan is 300 gm. to make balance.

<u>Answer the following:</u>

a) What is the mass of the piece of rock? What the direction of the effect of this mass?

....

b) What is the weight of the piece of rock? What the direction of the effect of this weight?

....

c) What is the effect of changing the place on both mass and weight of the rock piece?

....

Unit Two: Thermal Energy

Lesson (1): Heat conduction

A) **Complete the following statements**:

1. The heat is a form of..................... which transfers from .... temperature object to .... temperature object.
2. The temperature considers as indicator help us to express .... and ....of the body. •
3. The good conductor substances of heat are the substances which .... as....................
4. The bad conductor substances of heat arc the substances which .... as ....
5. The heat is used in industry and preparing of ....
6. The holder of cooking pans i s made of ....
7. When you touch a piece of ice, heat transfers from .... to ....
8. All .... are good conductor of heat.
9. .... conducts heat faster than aluminium.
10. Air is used in making .... as it is a heat ....
11. Plastic is .... conductor of heat, while copper is .... conductor of heat.
12. .... is used in making heavy blankets and .... that keep the body warm.
13. .... conducts heat slower than aluminum.

B) **Put (√) or (X) and correct the wrong one:**

1) Copper is considered from bad conductor substance. ( )
2) Aluminum conducts heat faster than copper. ( )
3) Mercury is considered from bad conductor substance. ( )
4) The different metals transfer heat by the same rate. ( )
5) Heat transfers from a cold object to a hot object. ( )

C) **What would happen in the following cases**

1) All substances that the man uses are good conductor of heat.

……………………………………………………………………………

2) There are no spaces between the railway bars.

……………………………………………………………………………

D) **Write the scientific:**

1) The substances that allow heat to pass through.
(………………………………)
2) The substances that not allow heat to pass through.
(………………………………)
3) An instrument used for measuring the temperature.
(………………………………)
4) The fastest metal in conducting heat. (………………………………)
5) The degree of hotness or coldness of a body. (……………………)

E) **Give reason for:**

1. The handles of cooking pots are made of wood or plastic while the cooking pots arc made of aluminum.

……………………………………………………………………………

2. Air is used in making insulating glass windows.

....

3. Leaving spaces between the railway bars.

....

4. Copper differs from iron and aluminium in conducting heat.

....

F) **Compare between:**

Bad heat conductor substances and good heat conductor substances

P. O. C	Heat insulator	Heat conductor
Definition		
Examples		
Usages		

Unit Two: Thermal Energy

Lesson (2): Measuring Temperature

A) Complete the following statements:

1) The types of thermometers are ....and ....
2) The Celsius thermometer is graduated from .... to......................
3) The minimum and maximum graduation of the clinical thermometer is between .... and .... Celsius degree.
4) The .... thermometer used to measure the water temperature.
5) The main idea of thermometer action is the change of the ....of the liquid inside as the .... change.
6) ....is a device used for measuring the temperature of the human body.
7) Liquids .... by heating and .... by cooling.
8) The medical thermometer is characterized by the presence of a .... above the mercury bulb.
9) Each degree in the medical thermometer is divided into........... parts, each part equals .... degree.
10) We use ....to sterilize the ....thermometer.
11) Mercury is a .... metal which is ....conductor of heat.
12) Water is breezed at ....°C and boiled at ....°C.
13) Measuring unit of temperature is called ....



14) Mercury remains liquid between two degrees of temperature which are ………………….and ………..

B) Put (√) or (X) and correct the wrong one:

1) Alcohol is the liquid that used in medical thermometer ( )
2) The graduation of clinical thermometer is from 37°C to 45°C and each degree is graduated to ten parts. ( )
3) Celsius thermometer is used to measure human temperature. ( )
4) There is a constriction above the mercury bulb in the Celsius ( )
5) The used liquid in the medical thermometer is mercury while in Celsius is water. ( )
6) One of mercury properties is that gives a narrow range to temperature measurement. ( )
7) Alcohol doesn't stick to the walls of the capillary tube so, it is used in making thermometers. ( )
8) The melting point of mercury is 100°C. ( )
9) The graduation of clinical thermometer is from 37°C to 45°C and each degree is graduated to ten parts. ( )
10) Mercury is used to sterilize medical thermometer. ( )
11) Mercury remains in liquid state between -39°C to 300°C ( )

C) Write the scientific:

1. A tool used to measure human body temperature. (………………………….)
2. A device used to measure the temperature of milk. (……………………………..)
3. A modern device used to measure body temperature especially for children. (…………………………….)

4. The liquid that is used in making the medical thermometers. (………………………….)
5. The part of the medical thermometer that prevents mercury from going back to the bulb. (…………………………….)

D) **Give reason for:**

1- The mercury gives wide range to measure the temperature.

……………………………………………………………………………………

2- There is a restriction in the capillary tube above mercury reservoir in clinical thermometer.

……………………………………………………………………………………

3- Mercury is used in clinical thermometer.

……………………………………………………………………………………

……………………………………………………………………………………

4- The clinical thermometer is not suitable for measuring the temperature of water.(boiling or freezing).

……………………………………………………………………………………

5- The idea of making thermometers depends on changing the volume of liquid by changing temperature.

……………………………………………………………………………………

E) **C) What would happen in the following case**

1) A medical thermometer is put in boiled water.

……………………………………………………………………………………

2) There is no constriction above the mercury bulb in the medical thermometer.

……………………………………………………………………………………

3) The medical thermometer is not sterilized before use.

……………………………………………………………………………………

4) Alcohol used instead of mercury in making thermometer.

…………………………………………………………………………………

F) **Compare between:**

Clinical thermometer and Celsius thermometer

P.O.C	Medical thermometer	Celsius thermometer
Usage		
Structure		
Used liquid		
Range of Scale		

G) **In the opposite figure** that illustrates the structure of the ……………… thermometer:

a) Number 1 is a bulb contains ……………

b) Number 2 is ……………………

c) Number 3 is ………… and its function is ……………………………

d) The thermometer scale starts from …………… °C to …………… °C

Unit Three: The Atmosphere

Lesson (1): Oxygen

A) Complete the following statements:

1) The gas which has great percentage in atmospheric air is …………………… while the percentage of Oxygen is …………………

2) Respiration and combustion processes consume ………………… gas.

3) Oxygen molecule consists of ………….. oxygen atoms.

4) Hydrogen peroxide decomposes in presence of manganese dioxide to …………………… and ……………………..

5) The Oxygen gas is produced plentifully from …………….. during ………………….process

6) The Oxygen gas of the atmosphere is consumed during ………………..and ……………. processes.

7) From the uses of oxygen gas are …………….

8) The gas which is used with acetylene in welding metals is ……………………..gas.

9) Oxygen is produced from ……………………process and carbon dioxide produced from ……………………process.



10) Oxygen is prepared from ……………………in presence of …………………

11) ……………………… acts as a catalyst in the preparation of oxygen.

12) Oxygen gas is ……………. than air.

13) The temperature of oxy-acetylene flame rises to ………….. °C that is sufficient to ……………. and ……………. metals.

14) . ………….. molecule consists of two hydrogen atoms and one oxygen atom, while ……………….. consists of 3 oxygen atoms.

15) Ironware must be isolated by …………. to protect them from ………………..

16) The slow combination between oxygen and elements in the presence of moisture is called ………….

17) The rapid combination between oxygen and elements producing heat and light is called ………………..

18) Oxygen gas is scarcely (slightly) soluble in …………………………..

19) Oxygen gas combines directly with most elements forming……………………..

B) Put (√) or (X) and correct the wrong one:

1) The molecule of Ozone gas consists of four Oxygen atoms. ( )

2) Oxygen gas burns but doesn't help burning.( )

3) When a glowing magnesium ribbon is placed in a jar containing oxygen gas, a white substance is formed. ( )

4) Nitrogen peroxide gas decomposes to water and nitrogen in presence of manganese dioxide. ( )

5) Oxygen molecule consists of three oxygen atoms. ( )

6) The mass of the material decreases after combination with oxygen. ( )

7) The ratio of nitrogen in the atmosphere is 21%. ( )

8) Oxygen is prepared by downward displacement of air. ( )

C) **Write the scientific:**

1) A mixture of different gases that surrounds the Earth's surface and attracted to it by gravity. (…………………………)

2) A gas used in its preparation hydrogen peroxide. (…………………………)

3) A gas produced from photosynthesis process. (…………………………)

4) A flame used in cutting and welding metals. (…………………………)

5) A substance that remains without any change in its quantity and properties during the chemical reaction. (…………………………)

6) A catalyst used in preparation of oxygen gas in laboratory. (…………………………)

7) Objects help in condensation of water vapour and falling rains.

(..................................)

8) A chemical substance that decomposed into water and oxygen during the preparation of oxygen in laboratory. (..............................)

D) **What would happen in the following cases**

1) A mass of cleansing before and after heating.

....

2) The decrease of the oxygen quantity in nature.

....

3) A nail wetted by water is exposed several days to humid air.

....

4) The bridges' pillars are not isolated with paints.

....

E) **Give reason for:**

1) Ozone layer has great importance in the life of creatures on the earth Surface.

....

2) Oxygen is collected by down displacement of water.

....

3) Oxy-acetylene flame is used for cutting and welding metals

....

4) Divers use oxygen cylinders during diving in water.

....

5) Oxygen ratio still constant in atmospheric air although a large part of it is consumed during respiration and combustion processes.

....

6) Manganese dioxide still without change in quantity and properties during preparation of oxygen.

....

7) Oxygen cylinders arc used during mountain climbing.

....

F) How to obtain:

- Oxygen from hydrogen peroxide

....

....

G) The shown apparatus represents:

a) The preparation of .... gas in laboratory.

b) Write the labels indicated by the numbers

Funnel
①
②
③
④
⑤

1) .... 2) .... 3) ....

4) .... 5) ....

c) The importance of no. 3 ....

d) The produced gas is collected by ....

because ....

Unit three: The Atmosphere

Lesson (2): Carbon dioxide

A) Complete the following statements:

1) By adding dilute hydrochloric acid to calcium carbonate powder .... is produced.
2) Carbon dioxide gas is produced as result of the combustion of .... as ....also produced from .... of living organism.
3) From the properties of carbon dioxide gas are .... and ....
4) .... gas is used in refrigeration, while .... gas is used in welding metals.
5) When the exhaled gas passed through clear lime water, it becomes turbid forming substance called ....
6) On putting a lighted magnesium ribbon in a cylinder filled with CO_2 a white substance of .... is formed and .... deposits on the wall of the cylinder.
7) Carbon dioxide gas is used in .... industry.



8) Photosynthesis process in the plant depend on the presence of ……………………………… gas.

9) Carbon dioxide molecule consists of one ………………. atom linked with two ………………. atoms.

10) Carbon dioxide gas is prepared in laboratory by dropping ……………………………… over …………………

11) Carbon dioxide gas is collected by …………. displacement of …………. as it is ……………………… than air

12) The ratio of carbon dioxide gas in atmospheric air is …………. and has the symbol of ………….

13) Limewater turns into ……………… in the presence of CO_2 due to the of …………. which insoluble in water.

14) Carbon dioxide gas is changed by …………. and …………. to, liquid then pressure is relieved composing ………………. which is used in refrigeration.

15) By increasing the percentage of CO2 gas the temperature of the Earth will ……………………causing …………………………

B) **Put (√) or (X) and correct the wrong one:**

1) Carbon dioxide gas turns clear lime water turbid. ( )

2) Carbon dioxide is used in manufacture of soft drink. ( )

3) A black precipitate is formed when carbon dioxide gas is passed in lime water. (   )

4) CO_2 is collected during its preparation in laboratory by downward displacement of air. (   )

5) Formation of a white substance on the wall on the jar, By putting a lighted magnesium ribbon in a cylinder filled with CO2. (   )

C) <u>What would happen in the following cases</u>

1) The percentage of carbon dioxide gas increases in the atmospheric air.

....

2) The decrease of the carbon dioxide quantity in nature.

....

3) Drinking big quantities of soft drink.

....

D) <u>Write the scientific:</u>

1) The gas that turns lime water turbid. (................................)

2) A gas produced from respiration and comes out with exhaled gas. (................................)

3) A gas can be prepared by using calcium carbonate powder and dilute hydrochloric acid. (................................)

4) A chemical substance used to detect the presence of carbon dioxide gas in air. (……………………………)

5) The process that results from adding yeast to dough and carbon dioxide gas is produced. (……………………………)

6) It is produced as a result of the reaction between lemon juice and sodium bicarbonate. (……………………………)

7) A chemical substance added to calcium carbonate during the preparation of carbon dioxide gas. (……………………………)

8) The material that is used in making cigarettes. (………………………)

E) **<u>Give reason for:</u>**

1) A white precipitate is formed when carbon dioxide gas passed in clear lime water.

……………………………………………………………………………………

2) Carbon dioxide gas has great vital importance in life continuity on earth surface.

……………………………………………………………………………………

3) The ratio of CO_2 gas increases in nature in last years.

……………………………………………………………………………………

4) CO_2 gas is used in putting off fires.

……………………………………………………………………………………

5) Yeast is added to dough during making bread.

……………………………………………………………………………………

6) Clear limewater is used to detect the presence of CO_2 gas.

……………………………………………………………………

7) Clear limewater gets turbid if CO_2 passes through it.

……………………………………………………………………

8) Burning a magnesium ribbon in the presence of carbon dioxide gas produces white and black substances.

……………………………………………………………………

F) **Compare between:**

a) Oxygen gas and carbon dioxide gas from the point of properties of each.

Oxygen gas	carbon dioxide gas

G) **How to obtain:**

➢ Carbon dioxide from calcium carbonate

……………………………………………………………………

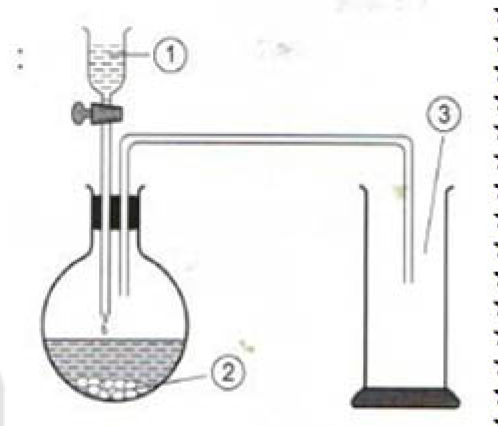
……………………………………………………………………

……………………………………………………………………

H) Look at the following figure, then answer :

a. It is the preparation of

……………………………gas.



b. Write what each label represents on the figure :

1) ……………………………

2) ……………………………

3) ……………………………

c. Mention two uses for the evolved gas.

- ……………………………………………………………………………………………

- ……………………………………………………………………………………………

d. We collect the evolved gas by ………………… replacement of air because it is …………………… than air.



Unit three: The Atmosphere

Lesson (3) : Nitrogen

A) Write the scientific

1) The main source of preparing nitrogen gas. (..............................)
2) A gas used in ammonia industry. (..............................)
3) The gas used to fill some types of lamps. (..............................)
4) A gas used in the storage petroleum and some inflammable substances. (..............................)
5) Chemical substances formed in the atmosphere as a result of combination between oxygen and nitrogen during lightning. (..............................)
6) A kind of plants that produce proteins from atmospheric nitrogen by the help of a specific type of bacteria that live in their roots. (..............................)
7) A gas has a very pungent smell. (..............................)

B) Complete the following statements:

1. Nitrogen forms .... % of the volume of the atmosphere and contributes in the composition of living organisms ....
2. The preparation of nitrogen gas from air depends on the removal of...............and ....from atmospheric air.
3. Oxygen reacts with nitrogen during lightning and produces ....
4. Nitrogen is used in manufacture of .... and ....

5. Nitrogen gas is used in manufacture of .... which does not make rust.
6. When a glowing magnesium ribbon is placed in a gar contains nitrogen gas then adding a little of water .... odor evolved due to formation of ....gas.
7. Nitrogen gas is used as a treatment of .... tumors.
8. Nitrogen is used in making ....and..............which are used in the manufacture of soil fertilizers
9. Legumes form proteins by the help of special bacteria known as ....which live in their ....
10. .... is the scientist that had discovered nitrogen.
11. When nitrogen reacts with a burning magnesium ribbon,............ is formed which dissolves in water to produce .... gas.

C) **Give reason for:**

1) Nitrogen gas is used in the atmosphere of the stores of explosive liquids.
....
2) Pungent odor is evolved as result of addition of water to the product of burning magnesium ribbon in nitrogen jar.
....
3) Nitrogen gas is called azote.

....

4) Nitrogen contributes in the composition of all living tissues.

....

5) Nitrogen is recently used in filling car tires.

....

D) **Put (√) or (X) and correct the wrong one:**

1. Nitrogen peroxide gas decomposes to water and nitrogen in presence of manganese dioxide. (   )
2. Nitrogen gas is used in putting off fires. (   )
3. Carbon dioxide is from the component of gunpowder. (   )
4. Nitrogen gas and Oxygen gas are used in cooling. (   )
5. Nitrogen gas dissolves in water. (   )
6. Nitrogen gas is called azote and its meaning gas of life. (   )
7. Nitrogen contributes in the composition of carbohydrate. (   )
8. Nitrogen reacts easily with other elements. (   )

E) **What would happen in the following cases**

1) We get rid of soil bacteria.

....

2) The decrease of the nitrogen quantity or not present in nature.

....

3) Nitrogen is used in filling cars and airplanes"' tires.

....

4) A banana fruit is immersed quickly in liquefied nitrogen.

....

F) Look at the following figure, then answer :

a) Label the figure.

1) .... 2) .... 3) ....

b) This apparatus is used for the preparation of ....

Water from the tap
Mixed air
Water
Bunsen Flame
1
2
3

c) Explain why atmospheric air is passed over label no. (1).

....

d) Explain why atmospheric air is passed over label no. (2)

....

e) Label no. (3) is collected in the cylinder by .... displacement of water, because ....

G) How to obtain:

- Nitrogen from atmospheric air

....

....

....



Unit four : Structure and function of living organisms

Lesson (1): Human nervous system

A) Write the scientific:

1) The building unit of nervous system. (………………………………)
2) A bony case that contains brain inside. (………………………………)
3) A part of nervous system that responsible for the transfer of nervous message from different parts of the body to the brain and vice versa. (………………………………)
4) A system responsible for integration and coordination between systems of the human body. (………………………………)
5) An organ responsible for the reflex actions of the body. (………………………………)
6) Spontaneous response from the body to the different stimuli. (………………………………)
7) The part which is responsible for keeping human body balance. (………………………………)
8) The center of the main control in human body. (………………………………)

9) A part of the brain that lies at the back area of the brain below the two hemispheres. (……………………………)

10) The system which is responsible for the communication and coordination between human body systems. (……………………………)

11) The system that consists of 43 pairs of nerves. (……………………….)

12) A structure links the brain with the spinal cord. (……………………..)

B) What would happen in the following cases:

1) Continuous exposing to the noise.

…………………………………………………………………………………………

2) The over use of stimulation drugs.

…………………………………………………………………………………………

3) Taking drugs.

…………………………………………………………………………………………

4) When you put your hand suddenly on a hot surface.

…………………………………………………………………………………………

5) Damage medulla oblongata lead to death.

…………………………………………………………………………………………

C) Put (√) or (X) and correct the wrong one:

1) The location of medulla oblongata is below cerebellum and joins the brain by spinal cord. (   )

2) From the brain, 10 pairs of spinal nerves come out. (   )

3) The spinal cord is responsible for reflex action in human body. ( )

4) The cerebellum is the center of the main control in your body. ( )

5) The number of cranial nerves is 31 pairs. ( )

6) The spinal cord controls heart beats. ( )

7) In the spinal cord, there are center responsible for sensory and kinetic responses. ( )

8) The location of cerebellum is behind the brain over the two cerebral hemispheres. ( )

9) The axon of the nerve cell is surrounded by gelatinous layer. ( )

10) Synapse is formed as result of connection of nerve cell axons. ( )

11) The spinal cord is responsible for the controlling the involuntary processes in our body. ( )

12) Medulla oblongata is below the spinal cord. ( )

D) **Give reason for:**

1) Staying away from tranquilizers and stimulants.

....

2) The cerebellum has great importance during the movement of the body.

....

3) The medulla oblongata keeps you alive during sleeping

....

4) The infection of medulla oblongata causes death.

....

5) The withdrawal of hand quickly upon touching sharp pin or hot body.

....

6) There is a brain inside the skull.

....

7) We must not taking sleeping tablets otherwise if the doctor advised it.

....

E) <u>**Complete the following statements:**</u>

1) The building unit of the nervous system is the .... cell that is called ....

2) The neuron consists of two main parts which are .... and ....

3) The dendrites are connected to neighboring neurons composing the ....

4) The nervous system consists of two main systems are .... and ....

5) The central nervous system consists of ………………….. and ……………………………

6) …………………. is responsible for keeping the body balance and it lies ……………. the two cerebral hemispheres.

7) The brain and the spinal cord are connected by the ……………………… which is responsible for ……………………………

8) The peripheral nervous system consists of ……………………. and ………………… nerves.

9) The axon of nerve cell is surrounded by ………………..sheath.

10) The brain consists of …………….,……………. and ……….

11) The outer surface of the two cerebral hemispheres is called cerebral ……………………… and its colour is……………………

12) The over intake of tea and coffee causes ……………………and ……………………

13) The five sensation centers are located in ………………………………

14) The number of cranial nerves is ……………………… and the number of spinal nerves is……………………

15) The centers of thinking and memory lie in ……………………………

16) The main center of the control in your body is ………… and it is found inside bony case called …………….

F) **Locate each of the following parts in the human body:**

1) The brain..

2) The two cerebral hemispheres..

3) The cerebellum. ....

4) The medulla oblongata...

5) The spinal cord..

G) **Mention one function for each of the following:**

1) The two cerebral hemispheres.

....

2) Spinal cord.

....

3) The vertebral column.

....

4) The skull.

....

5) The nerve cell in the human body.

....

6) The dendrites of nerve of nerve cell.

....

7) The Peripheral nervous system.

....

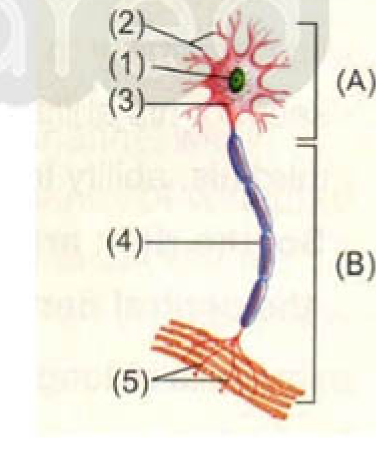
H) Com pare between:

- The central nervous system and peripheral nervous system

P.O.C.	The central nervous system	The peripheral nervous system
Structure		
Function		

I) Look at the following figure, then answer:

1. This figure indicates the structure of...............
2. Complete :
   - Part (A) represents the...............
   - Part (B) represents the...............
3. Write the labels.
   (1) ....
   (2) ....
   (3) ....
   (4) ....
   (5) ....



Unit four : Structure and function of living organisms

Lesson (2): Human locomotory system

A) Write the scientific:

1) It consists of 33 bony vertebrae. (.......................................)
2) Types of muscles act spontaneously and can't be controlled. (.......................................)
3) Group of joints that allow movement in one direction. (.......................................)
4) Long strips that fix muscles on bones. (.......................................)
5) The structure which protects the heart and lungs. (.......................................)
6) The location of bones touches and allows moving. (...................................)
7) Ligaments ties muscles with bone. (.......................................)
8) Areas between vertebrae of vertebral column separate and protect from friction between them. (.......................................)
9) The vitamin which produced in the body by the exposure to sunlight. (....)



B) What would happen in the following cases?

1) There are no joints in the skeleton.

....

2) The knee joint becomes from wide movement joints.

....

3) Your knee collide a hard body.

....

4) Jumping from high places.

....

5) All the bones of the human body are without joints.

....

6) When the shoulder joints becomes from the limited movement joint.

....

7) Drinking big quantities of soft drink.

....

8) The absence of cartilage between vertebrae of the backbone

....

C) Put (√) or (X) and correct the wrong one:

1) The wrist joint is considered as freely movable joint. (   )
2) The shoulder joint is considered from immovable joints.(   )
3) The cartilages join between muscles and bones. (   )
4) Joints link bones and muscles. (   )
5) The skull has freely movable joints. (   )

6) Muscles which work automatically are called voluntary muscles

7)

D) **Give reason for:**

1) The necessity of eating healthy food rich in calcium.

....

2) We can't control the muscles of alimentary canal, blood vessels and urinary bladder.

....

3) The rib cage surrounds both the heart and the lungs.

....

4) The appendicular skeleton system is important for human life.

....

5) The muscular system is considered as the main engine of our body.

....

6) There are cartilages between the vertebrae of the back bone.

....

E) **Complete the following statements:**

1) The human skeletal system consists of........................ and ....

2) .... joints are limited movement joint.

3) The axial skeleton consists of ....and ....and ....

4) The joints which allow movement in one direction only are called .... joints.

5) The locations in which the bones meet together are called ....

6) The thoracic cage in the man consists of .... Pairs of ribs

7) .... is from freely moveable joint while .... is from immoveable joint.

8) Human locomotory system consists from .... and ....

9) The number of vertebrae of vertebral column is ....

10) .... helps in the inhalation and exhalation processes.

11) The function of joints is to ....

12) Muscles generate .... energy and movement to the body

13) Face muscles and abdominal wall muscles are from the .... muscles.

14) Heartbeats and gastrointestinal tract muscle are .... muscles.

F) **Mention one function for each of the following:**

1) Thoracic cage. (Rib cage).

....

2) Muscles in making movements.

....

3) The cartilages.

....

4) The tendons.

....

5) The joints.

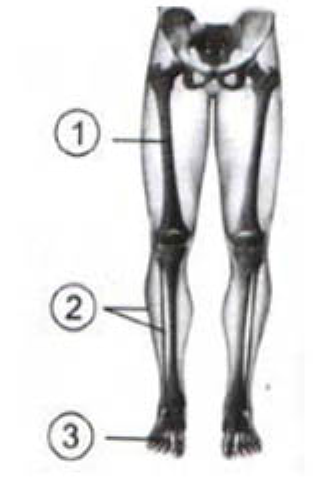
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G) **Compare between:**

➢ The axial skeleton and appendicular skeleton.

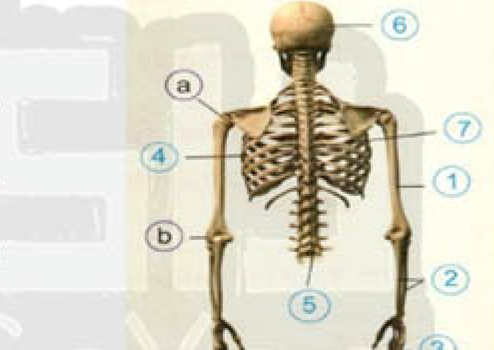
P.O.C.	The axial skeleton	The appendicular skeleton
Structure		
Function		

H) Look at the following figure, then answer



- The figure represents the bones of............... limbs.
- Label the numbered bones:
  1) ....
  2) ....
  3) ....

- The figure represents the .... skeleton and the bones of .... limbs.
- Label the numbered bones



1) .... 2) ....
3) .... 4) ....
5) .... 6) ....
7) ....

Name of Joints	Its type
a).............................	....
b).........................	....
c).............................	....



